

9 18 27 36 45 54
5' AGA ACG GTG AGG ATG ACC GAC GTA TAG GCG AGA GCC TAG GTA CGC CAT GCC AGG

63 72 81 90 99 108
TCA CCG GTC CGG CAA TTC CCG GGT CGA CCC ACG CGT CCG CTT GGA GGG ACG CTG

117 126 135 144 153 162
GGT TCA ACT TGA AGC CCT TCC ACA GAC ATT AAG TCG GTG AAA ACC ATT CAC TAG

171 180 189 198 207 216
GAG AGG AGA AAC ACA ATG GCC ACC AAG ACA GAG TTG AGT CCC ACA GCA AGG GAG

225 234 243 252 261 270
AGC AAG AAC GCA CAA GAT ATG CAA GTG GAT GAG ACA CTG ATC CCC AGG AAA GTT
M Q V D E T L I P R K V

279 288 297 306 315 324
CCA AGT TTA TGT TCT GCT CGC TAT GGA ATA GCC CTC GTC TTA CAT TTC TGC AAT
P S L C S A R Y G I A L V L H F C N

333 342 351 360 369 378
TTC ACA ACG ATA GCA CAA AAT GTC ATC ATG AAC ATC ACC ATG GTA GCC ATG GTC
F T T I A Q N V I M N I T M V A M V

387 396 405 414 423 432
AAC AGC ACA AGC CCT CAA TCC CAG CTC AAT GAT TCC TCT GAG GTG CTG CCT GTT
N S T S P Q S Q L N D S S E V L P V

441 450 459 468 477 486
GAC TCA TTT GGT GGC CTA AGT AAA GCC CCA AAG AGT CTT CCT GCA AAG TCC TCA
D S F G G L S K A P K S L P A K S S

495 504 513 522 531 540
ATA CTT GGG GGT CAG TTT GCA ATT TGG GAA AGG TGG GGC CCT CCA CAA GAA CGA
I L G G Q F A I W E R W G R P P Q E R

549 558 567 576 585 594
AGC AGA CTC TGC AGC ATT GCT TTA TCA GGA ATG TTA CTG GGA TGC TTT ACT GCC
S R L C S I A L S G M L L G C F T A

603 612 621 630 639 648
ATC CTC ATA GGT GGC TTC ATT AGT GAA ACC CTT GGG TGG CCC TTT GTC TTC TAT
I L I G G F I S E T L G W P F V F Y

657 666 675 684 693 702
ATC TTT GGA GGT GTT GGC TGT GTC TGC TGC CTT CTC TGG TTT GTT GTG ATT TAT
I F G G V G C V C C L L W F V V I Y

FIGURE 1A

711 720 729 738 747 756

GAT	GAC	CCC	GTT	TCC	TAT	CCA	TGG	ATA	AGC	ACC	TCA	GAA	AAA	GAA	TAC	ATC	ATA
D	D	P	V	S	Y	P	W	I	S	T	S	E	K	E	Y	I	I

765 774 783 792 801 810

TCC	TCC	TTG	AAA	CAA	CAG	GTC	GGG	TCT	TCT	AAG	CAG	CCT	CTT	CCC	ATC	AAA	GCT
S	S	L	K	Q	Q	V	G	S	S	K	Q	P	L	P	I	K	A

819 828 837 846 855 864

ATG	CTC	AGA	TCT	CTA	CCC	ATT	TGG	TCC	ATA	TGT	TTA	GGC	TGT	TTC	AGC	CAT	CAA
M	L	R	S	L	P	I	W	S	I	C	L	G	C	F	S	H	Q

873 882 891 900 909 918

TGG	TTA	GTT	AGC	ACA	ATG	GTT	GTA	TAC	ATA	CCA	ACT	TAC	ATC	AGC	TCT	GTG	TAC
W	L	V	S	T	M	V	V	Y	I	P	T	Y	I	S	S	V	Y

927 936 945 954 963 972

CAT	GTT	AAC	ATC	AGA	GAC	AAT	GGA	CTT	CTA	TCT	GCC	CTT	CCT	TTT	ATT	GTT	GCC
H	V	N	I	R	D	N	G	L	L	S	A	L	P	F	I	V	A

981 990 999 1008 1017 1026

TGG	GTC	ATA	GGC	ATG	GTG	GGA	GGC	TAT	CTG	GCA	GAT	TTC	CTT	CTA	ACC	AAA	AAG
W	V	I	G	M	V	G	G	Y	L	A	D	F	L	L	T	K	K

1035 1044 1053 1062 1071 1080

TTT	AGA	CTC	ATC	ACT	GTG	AGG	AAA	ATT	GCC	ACA	ATT	TTA	GGA	AGT	CTC	CCC	TCT
F	R	L	I	T	V	R	K	I	A	T	I	L	G	S	L	P	S

1089 1098 1107 1116 1125 1134

TCA	GCA	CTC	ATT	GTG	TCT	CTG	CCT	TAC	CTC	AAT	TCC	GGC	TAT	ATC	ACA	GCA	ACT
S	A	L	I	V	S	L	P	Y	L	N	S	G	Y	I	T	A	T

1143 1152 1161 1170 1179 1188

GCC	TTG	CTG	ACG	CTC	TCT	TGC	GGA	TTA	AGC	ACA	TTG	TGT	CAG	TCA	GGG	ATT	TAT
A	L	L	T	L	S	C	G	L	S	T	L	C	Q	S	G	I	Y

1197 1206 1215 1224 1233 1242

ATC	AAT	GTC	TTA	GAT	ATT	GCT	CCA	AGG	TAT	TCC	AGT	TTT	CTC	ATG	GGA	GCA	TCA
I	N	V	L	D	I	A	P	R	Y	S	S	F	L	M	G	A	S

1251 1260 1269 1278 1287 1296

AGA	GGA	TTT	TCG	AGC	ATA	GCA	CCT	GTC	ATT	GTA	CCC	ACT	GTC	AGC	GGA	TTT	CTT
R	G	F	S	S	I	A	P	V	I	V	P	T	V	S	G	F	L

1305 1314 1323 1332 1341 1350

CTT	AGT	CAG	GAC	CCT	GAG	TTT	GGG	TGG	AGG	AAT	GTC	TTC	TTC	TTG	CTG	TTT	GCC
L	S	Q	D	P	E	F	G	W	R	N	V	F	F	L	L	F	A

1359 1368 1377 1386 1395 1404

GTT	AAC	CTG	TTA	GGA	CTA	CTC	TTC	TAC	CTC	ATA	TTT	GGA	GAA	GCA	GAT	GTC	CAA
V	N	L	L	G	L	L	F	Y	L	I	F	G	E	A	D	V	Q

FIGURE 1B

Docket No.: PF-0221-3 DIV
Inventors: Lal and Bandman
Title: NOVEL HUMAN SODIUM-DEPENDENT PHOSPHATE COTRANSPORTER
Serial No.: To Be Assigned

1413 1422 1431 1440 1449 1458
GAA TGG GCT AAA GAG AGA AAA CTC ACT CGT TTA TGA AGT TAT CCC ACC TTG GAT
E W A K E R K L T R L

1467 1476 1485 1494 1503 1512
GGA AAA GTC ATT AGG CAC CGT ATT GCA TAA AAT AGA AGG CTT CCG TGA TGA AAA

1521 1530 1539 1548 1557 1565
TAC CAG TGA AAA GAT TTT TTT TTC CTG TGG CTC TTT TCA ATT ATG AGA TCA GTT

1575 1584 1593 1602 1611 1620
CAT TAT TTT ATT CAG ACT TTT TTT TGA GAG AAA TGT AAG ATG AAT AAA AAT TCA

1629 1638
AAT AAA ATG ATA ACT AAG AAT GC 3'

09991242 214604

FIGURE 1C

卷之三

Docket No.: PF-0221-3 DIV
 Inventors: Lal and Bandman
 Title: NOVEL HUMAN SODIUM-DEPENDENT PHOSPHATE COTRANSPORTER
 Serial No.: To Be Assigned

FIGURE 2A

“TOSTER” 2TETRISUBO

Docket No.: PF-0221-3 DIV
 Inventors: Lal and Bandman
 Title: NOVEL HUMAN SODIUM-DEPENDENT PHOSPHATE COTRANSPORTER
 Serial No.: To Be Assigned

207	F S H O W L V S T M V V Y I P T Y I S S S V Y H V N I R D N G L L S A L P F I V A	754412
272	F T F F W S H N I M T L Y T P M F I N S M L H V N I K E N G F L S S L P Y L F A	GI 450532
312	F C R S W T F Y L L I S Q P A Y F E E V F G F E I S K V G L V S A L P H L V M	GI 507415
247	W V I G M V G G Y L A D F L L T K N - F R L I T V R K I A T I L G S L P S S A L	754412
312	W I C G N L A C Q L S D F F L T R N I L S V I A V R K L F T A A G F L L P A I F	GI 450532
352	T I I V P I G G Q I A D F I L R S R H I M S T T N V R K L M N C G G F G M E A T L	GI 507415
286	I V S L P Y L N S G Y I T A T A L L T L S C G L S T L C Q S G I Y I N V L D I A	754412
352	G V C L P Y L S S T F Y S I V I F I I L A G A T G S F C L G G V F I N G L D I A	GI 450532
392	L L V V G Y S H S K G V A I S - F L V L A V G F S G F A I S G F N V N H L D I A	GI 507415
326	P R Y S S F L M G A S R G F S S I A P V I V P T V S G F L L S Q D P E E G W R N	754412
392	P R Y F G E I K A C S T L T G M I G G L I A S T L T G L L I K Q D P E S A W F K	GI 450532
431	P R Y A S I L M G I S N G V G T L S G M V C P I I V G A M T K H K T R E E W Q Y	GI 507415
366	V F F I L F A V N L L G L L F Y L I F G E A D V Q E W A K E R K L T R - - -	754412
432	T F I I M A I A I N V T G L I F Y L I V A T A E I Q D W A K E K Q H T R - - -	GI 450532
471	V F L I A S L V H Y G G V I F Y G V F A S G E K Q P W A E P E E M S E E K C G F	GI 507415
401	- -	754412
467	- -	GI 450532
511	V G H D Q L A G S D E S E M E D E V E P P P G A P P A P P S Y G A T H S T V Q P	GI 507415
401	- -	754412
467	- -	GI 450532
551	P R P P P P V R D Y	GI 507415

FIGURE 2B

Docket No.: PF-0221-3 DIV
Inventors: Lal and Bandman
Title: NOVEL HUMAN SODIUM-DEPENDENT PHOSPHATE COTRANSPORTER
Serial No.: To Be Assigned

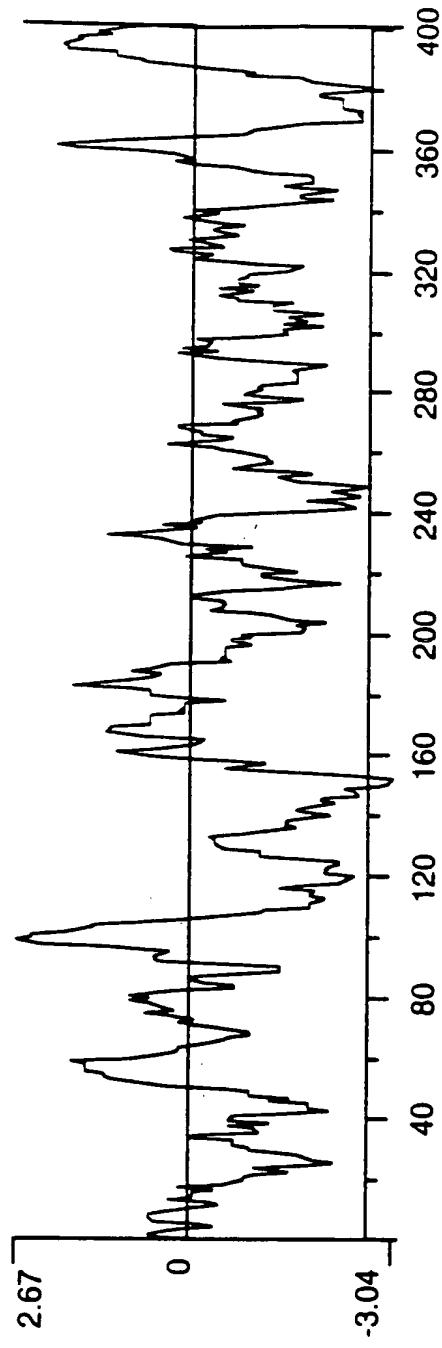


FIGURE 3A

பாகாக்டீரியால்டெக்னாலஜி

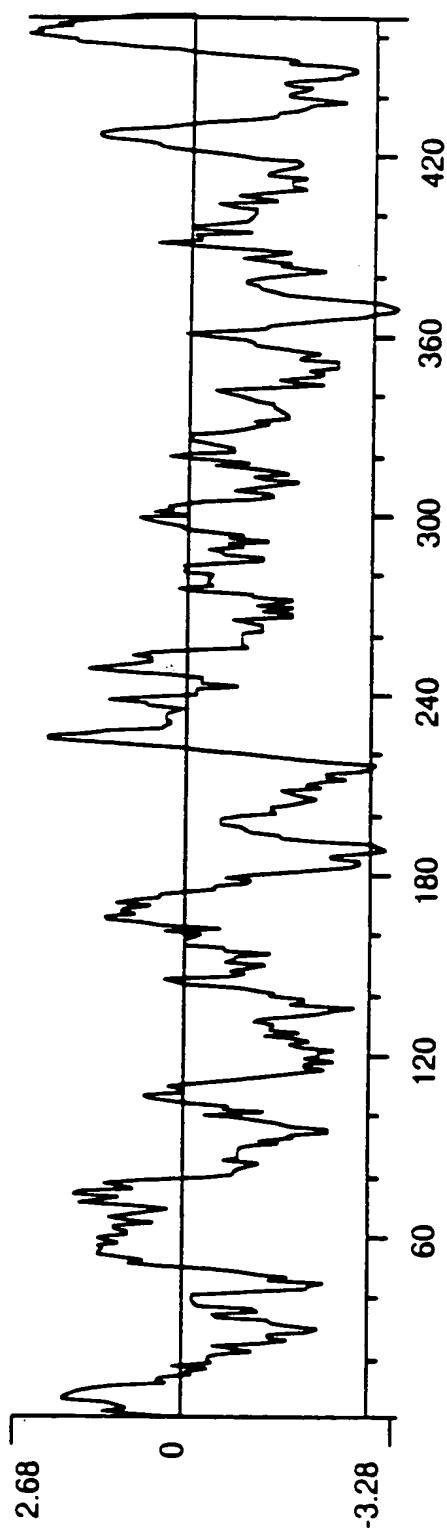


FIGURE 3B

FIGURE 3C

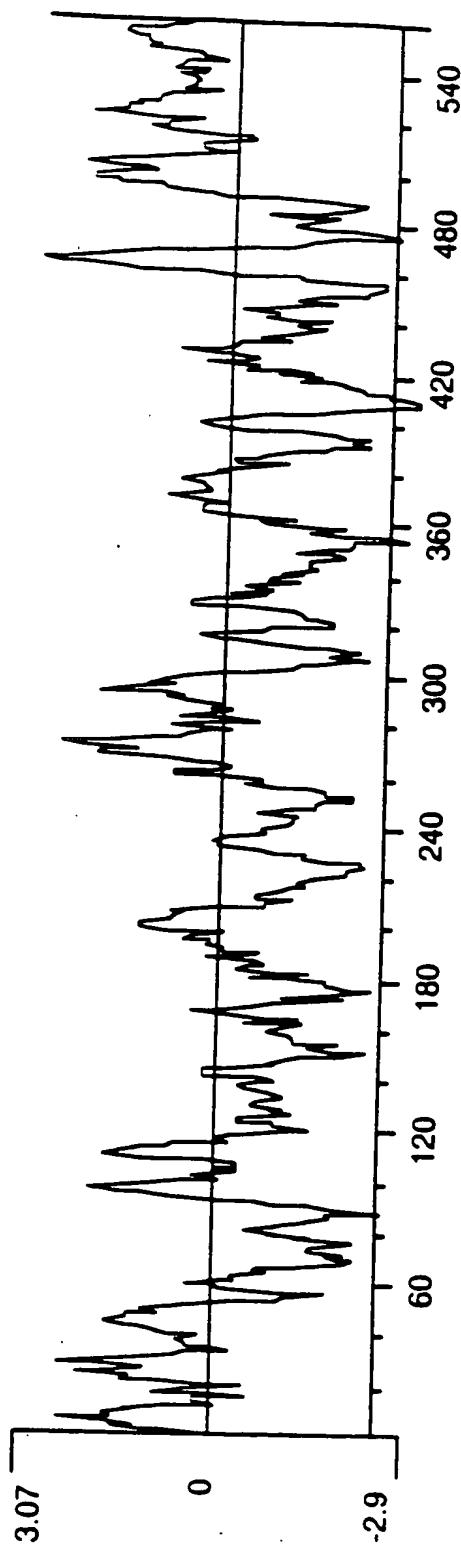


FIGURE 3C